



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Sas et al.

Serial No.: 10/037,881

Filed: 1/4/2002

Title: BACTERIAL ISOLATES FROM
ORGANISMS THAT RESPIRE AT
LEAST PARTIALLY THROUGH
THEIR SKIN AND BIOLOGICALLY
ACTIVE EXTRACTS DERIVED
THEREFROM

Group Art Unit:

Examiner:

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TECH CENTER 1800/2900

Attorney Docket No.: 4532670/6200

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement under 37 CFR 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action or notice of allowance, whichever occurs first, but before payment of the issue fee)
- ☒ Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which

applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

The relevance of the attached references is that this is the closest art of which Applicant is aware. Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit: 12-05-02

Typed Name: Jeri Krutsinger

Signature: Jeri Krutsinger

Kent A. Herink

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Date: 12/05/02

Telephone No.: 515-288-2500



PTO/SB/08A (10-01)

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/037,881	
			Filing Date	01-04-2002	
			First Named Inventor	Sas, Benedikt	
			Art Unit		
			Examiner Name		
Sheet	1	of	5	Attorney Docket Number	4532670/6200 (KEM 42)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
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		Filing Date	01-04-2002
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		Group Art Unit	
		Examiner Name	
Sheet 2	of 5	Attorney Docket Number	4532670/6200 (KEM 42)

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BEATIE, A.J. Beatie, "Discovering new biological resources - Chance or reason", <u>Earth</u> , 1992, p. 290-293, 42(4).	
		CARTE, B.K., "Biomedical potential of marine natural products", <u>Bioscience</u> , 1996, p. 271-287, 46(4).	
		COGLAN, A., "Bug busters", <u>New Scientist</u> , 2000, p.15, 166(2233).	
		CRUMP, M.L., "Parental care", <u>Amphibian Biology Vol. 2: Social Behaviour</u> , 1995, p. 518-567, Surrey Beatty and Sons, Chipping Norton, New South Wales, Australia.	
		DANIEL, J.C., Jr., and R.W. SIMPSON, "A negative note on antibiotics", <u>Herpetologica</u> , 1954, 10:15.	
		DUELLMAN, W.E., and L. TRUEB, <u>Biology of Amphibians</u> , 1986, McGraw Hill, New York	
		FORESTER, D.C., "Laboratory encounters between attending <i>Desmognathus ochrophaeus</i> (Amphibia, Urodela, Plethodontidae) females and potential predators", <u>Journal of Herpetology</u> , 1978, 12:537-541.	
		FORESTER, D.C., "The adaptiveness of parental care in <i>Desmognathus ochrophaeus</i> (Urodela: Plethodontidae)", <u>Copeia</u> , 1979, p. 332-341.	
		FOX, H., "Structure of the integument", 1994, Cpt. 1 in <u>Amphibian Biology, Vol 1, The Integument</u> , Surrey Beatty and Sons, Chipping Norton.	
		FREDERICKSON, A.G., and G. STEPHANOPOULOS, "Microbial competition", <u>Science</u> , 1981, p. 972-979, 213.	
		GLAUSIUSZ, J., "The frog solution", <u>Discover</u> , 1998, p. 88-92, 19: (11).	

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		First Named Inventor	Sas, Benedikt		
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		Examiner Name			
Sheet	3	of	5	Attorney Docket Number	4532670/6200 (KEM 42)

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
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		GUIRARD, B.M., and E.E. SNELL, "Nutritional requirements of microorganisms", <u>The Bacteria. A Treatise on Structure and Function. Vol. IV: The Physiology of Growth</u> , 1962, p. 33-93, Academic Press, New York, New York, U.S.A.	
		HIGHTON, R. and T. SAVAGE, "Functions of the brooding behavior in the female red-backed salamander, <i>Plethodon cinereus</i> ", <u>Bulletin of the Florida State Museum</u> , 1961, p. 235-237, 6.	
		LILLEYWHITE, H.B., and P.F.A. MADERSON, "The structure and permeability of the integument", <u>American Zoologist</u> , 1988, p. 945-962, 28.	
		McNAMEE, D., "Eye of newt, toe of frog", <u>Lancet</u> , 1994, p. 1696-1698, 344(8938).	
		PORT, O., "A leap in drug research from frogs", <u>Business Week</u> , 2001, p. 99, Issue 3752.	
		RASOOL, K., and J.W.T. WIMPENNY, "Mixed continuous culture experiments with an antibiotic-producing streptomycete and <i>Escherichia coli</i> ", <u>Microbial Ecology</u> , 1983, pg. 267-277, v. 8.	
		RENNIE, J., "No snake oil here", <u>Scientific American</u> , 1993, 266 (3), p. 136-137.	
		RITTER, W.E., "Further notes on the habits of <i>Autodax lugubris</i> ", <u>American Naturalist</u> , 1903, 37:883-886.	
		SALTHER, S.N., and J.S. MECHAM, 1974, "Reproductive and courtship patterns", <u>Physiology of the Amphibia</u> , 1974, Vol. 2: p. 310-521, Academic Press, New York, New York, U.S.A.	
		SCHAECHTER, M. and I. BROCKHAUSEN, "The biosynthesis of branched O-glycans, In Mucus and related topics", <u>Symposia of the Society for Experimental Biology</u> , no. XLIII, 1989, University of Cambridge, Cambridge.	
		STIENBORNER, S.T., G.J. CURRIE, J.H. BOWIE, J.C. WALLACE, and M.J. TYLER, "New antibiotic caerin 1 peptides from the skin of the Australian tree frog <i>Litoria chloris</i> . Comparison of the activities of the caerin 1 peptides from the genus <i>Litoria</i> ", <u>Journal of Peptide Research</u> , 1998, 51: (2), 121-127.	

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		Filing Date	01-04-2002 DEC 12 2002
		First Named Inventor	Sas, Benedikt
		Group Art Unit	TECH CENTER 1600/2900
		Examiner Name	
Sheet 4	of 5	Attorney Docket Number	4532670/6200 (KEM 42)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		TILLEY, S. G., "Aspects of parental care and embryonic development in <i>Desmognathus ochrophaeus</i> (Amphibia: Plethodontidae) in western North Carolina", <u>American Midland Naturalist</u> , 1972, 89:394-407.	
		TILLEY, S.G. and J. BERNARDO, "Life history evolution in plethodontid salamanders", <u>Herpetologica</u> , 1993, 49:154-163.	
		TURPIN, P.E., V.K. DIHR, K.A. MAYCROFT, C. ROWLANDS, and E. M. H. WELLINGTON, "The effect of <i>Streptomyces</i> species on the survival of <i>Salmonella</i> in soil", <u>FEMS Microbiol. Ecol.</u> , 1992, 101: p. 271-280.	
		TYLER, M. J., "Frogs and Drugs", <u>Australian Natural History</u> , 1995, 24(12): p. 46-52.	
		VIAL, J.L., and F.B. PRIEB, "Antibiotic assay of dermal secretions from the salamander, <i>Plethodon cinereus</i> (Green)", <u>Herpetologica</u> 1966, 22: p. 284-287.	
		VIAL, J.L. and F.B. PRIEB, "An investigation of antibiosis as a function of brooding behavior in the salamander, <i>Plethodon cinereus</i> ", <u>Transactions of the Missouri Academy of Science</u> , 1967, 1:37-40.	
		WAKE, D.B. and S.M. MARKS, "Development and evolution of plethodontid salamanders: a review of prior studies and a prospectus for future research", <u>Herpetologica</u> , 1993, 49:194-203.	
		WIENER, P., "Experimental studies on the ecological role of antibiotic production in bacteria", <u>Evolutionary Ecology</u> , 1996, 10:405-421.	
	X	WILLIAMS, S. T., "Are antibiotics produced in soil?", <u>Pedobiology</u> , 1982, 23:85-87. <i>meaning.</i>	
		WILLIAMS, S.T. and J.C. VICKERS, "The ecology of antibiotic production", <u>Microbial Ecology</u> , 1982, 12:43-52.	
		WIMPENNY, J.W.T., S.L. KINNIMENT, and M.A. SCOURFIELD, "The physiology and biochemistry of biofilms", <u>Microbial Biofilms: Formation and Control</u> , 1993, Pp. 274 – 318, Blackwell Scientific Publications, London, U.K.	

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
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		<p>ERSPAMER, V., "Bioactive Secretion of the Amphibian Integument", <i>Amphibian Biology Vol 1 The Integument</i>, 1994, p. 179-223, Surrey Beatty and Sons, Chipping Norton, New South Wales, Australia.</p>

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